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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

U. S. DEPARTMENT OF AGRICULTURE

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LINE FOREMAN RESUSCITATES SHOCK VICTIM

SUPERVISORS WORKSHOP CONFERENCE PROVIDES VALUABLE DISCUSSION

Lawrence C. Meyer of Michigan and O. L. Heath of Virginia were elected chairmen of the Safety Supervisors' Workshop Conference October 17, 18 and 19 at REA Headquarters in St. Louis. H. C. Potthast of Wisconsin was elected Secretary. Meyer and Heath led the discussion. The following topics were discussed:

- Selection of Employees - Foreman.
- Physical Examination.
- How to Get Men to Follow Instructions.
- How Often Do You Test Rubber Gloves.
- Conduct of Safety Supervisor.
- Transportation.
- Teaching Methods - Field - Classroom.

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SECONDARY VOLTAGES ALSO DANGEROUS

Secondary voltages too often are disregarded by the lineman as presenting no particular hazard. REA accident files tell a different story. One lineman and several co-op members have suffered fatal shocks this year from 120 volt circuits. Other linemen have been knocked from the pole and seriously injured by the fall as a result of secondary voltage contact. Low voltage shock can no longer be shrugged off as only 120 volts.

See page 3 for accounts of three low-voltage accidents.

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SPEEDY APPLICATION OF ARTIFICIAL RESPIRATION PROVES SUCCESSFUL

NATURE OF WORK

Details of Structure - A1 - M25-1. Crew foreman, two second-class linemen and three helpers were stringing and sagging one span of one wire secondary conductor under existing primary and neutral, and one span of 2 wire secondary, lateral to existing line.

Setting of secondary pole, stringing and sagging lateral secondary wires had been completed, and crew was sagging secondary wire under existing primary and neutral.

DETAILS OF ACCIDENT

The existing span in which secondary was being sagged was 635 feet, and primary wire has 14 feet 4 inches sag at 95 degrees. The secondary bracket attachment on pole was 18 inches below neutral conductor. The right of way under the line in this span was badly grown up with brush, including two old apple trees almost directly under the line. Lineman W and Lineman S were on dead end pole, both safety belts being attached around pole below secondary bracket. W's safety being above S's.

A rope line was attached to conductor and Helpers M and T were pulling slack out of secondary wire. W was in position to catch off wire with coffer hoist and wire grip that previously had been attached for this purpose.

Lineman S was on opposite side of pole from W holding loose end of secondary wire to prevent it from getting into hot primary wire.

Helper Y was in middle of span, attempting to get wire clear of apple trees by pushing it through limbs with a pike pole. W had put wire grip on secondary wire and pulled coffer hoist chain out to full length. But he couldn't put hook in wire

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Published Monthly in the Interest of Safety
for Employees of REA Systems

David A. Fleming, Editor

PUBLIC RELATIONS AND SAFETY

Public relations can play a very useful role in a Safety and Job Training Program. In one state this subject is considered as personnel relations rather than public relations.

The word personnel is used because the consumer is a member of the cooperative and is, therefore, just as much a part of the organization as the employee.

In either case this subject is concerned with human relations and has an important bearing on safety and job training. Good personnel relations are necessary to make the program effective. Good personnel relations build confidence and respect and create a willingness on the part of the individual to cooperate with other people.

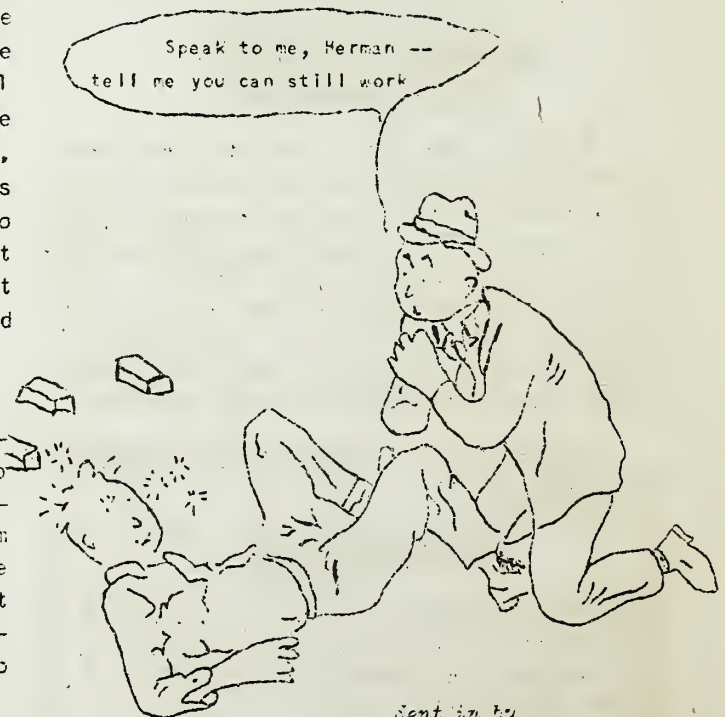
Effective job training requires close cooperation between the supervisor, the management, and the employee. Good personnel relations are the bonds which tie these groups together so that they work, not for, nor against, but with each other. Regardless of the number of safe ways developed to do a job, or the amount of protective equipment made available, these methods and equipment may not be accepted for general use if good personnel relations do not exist.

Good personnel relations between cooperative employees and the members are also important. A classic example of this cooperation occurred when a gang clearing storm trouble called at a member's home to use the phone and was served ham and eggs and hot coffee. That gang had good personnel relations and the men were in better shape to continue their trouble-shooting.

Good relations between cooperative em-

ployees and members are helpful in getting the member to correct hazards on his own premises. Confidence and good will allows him to accept your recommendations and make the necessary changes. Safety-conscious members will more readily report potentially dangerous conditions along the highline if a feeling of friendliness and of working together for co-op welfare exists between them and the co-op personnel. In securing right-of-way, these relations are very important. Right-of-way affects safety, in that bad tree conditions often can be avoided at the time the line is built. The line also may be placed in a location more accessible for maintenance.

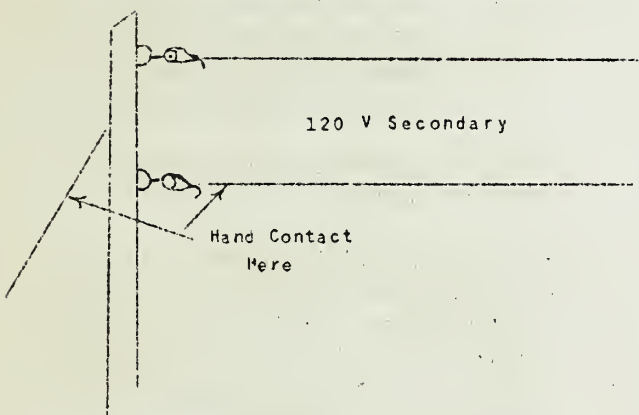
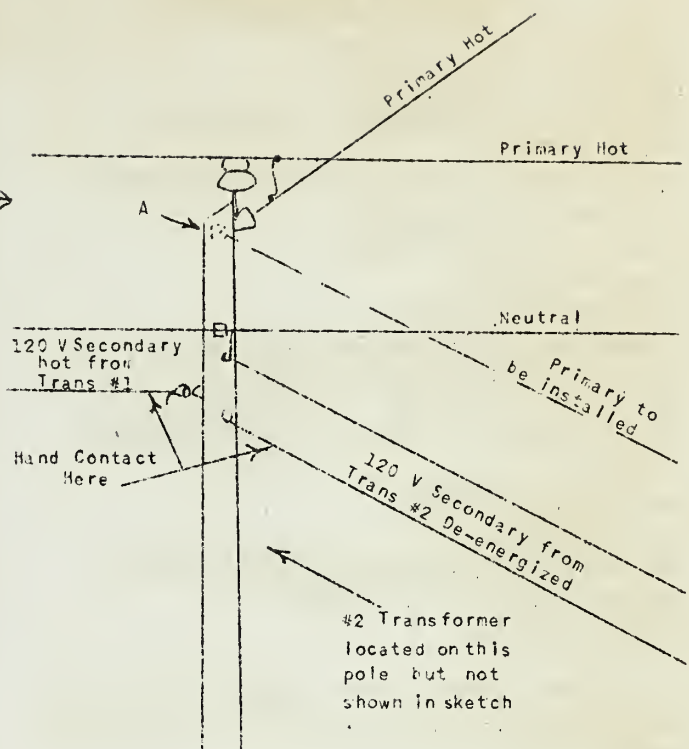
Little things are often determining factors in whether our personnel relations are good or bad. Just being friendly helps. Explaining why something should or should not be done, rather than just attempting to lay down the law, also helps. A few minutes' time in showing a member how to read his meter, if he asks, or answering his questions about some wiring problem, even though doing these things isn't your job, will pay big dividends later. If we learn to do the little things well, we can greatly improve our personnel relations.



Sent in by
E. H. Stovall, Mississippi Supervisor

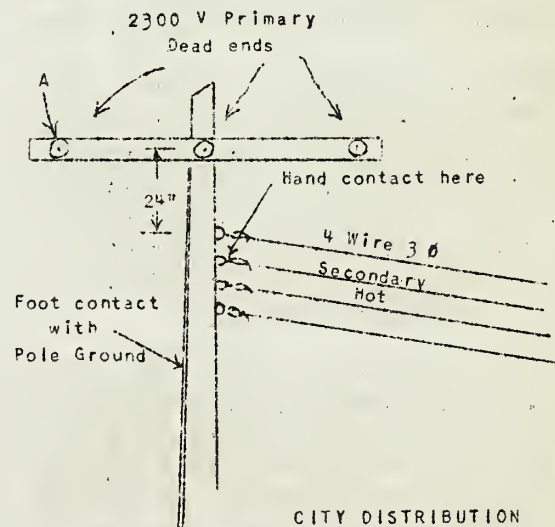
DANGER - 120 VOLTS

Lineman climbed pole to install eye nut and primary dead end on back side of (hot lateral primary) dead end bolt - point (A). A new primary was to be installed above lateral secondaries fed by transformer #2. (Not in sketch) Transformer #2 was de-energized. Transformer #1, (also not in sketch) fed secondaries dead-ended on the pole, and was hot. The lineman grasped hot secondary from transformer #1 and de-energized secondary from transformer #2, thereby placing himself in series between hot secondary #1 and the load on dead secondary #2, including the secondary winding of transformer #2, one end of which was grounded. The lineman could not let go-- was pulled loose by hand-line and fell to ground. Electric shock and fall--non-fatal.



The lineman climbed the pole and grasped guy with left hand and the hot leg of the 120 volt secondary with the right hand, thus completing the circuit between ground and hot secondary. Contact was good and lineman could not let go either guy or hot hot secondary. The lineman's hooks cut out which caused him to fall and jerk loose from the energized wire. Electric shock and fall--non-fatal.

The lineman climbed up to tap primary dead end at (A). He started to safety off on clear side of pole under primary. In placing safety strap around pole and between secondaries, his hand touched the tip of the secondary dead end clamp. His foot was against the pole ground wire. The resulting shock knocked him from the pole. He fell 20 feet, his head missing an iron fence by about 6 inches. Electric shock and fall--non-fatal.



WORKSHOP CONFERENCE

(Continued from page 1)

How to Stop Shock Accidents.
Individual Responsibility.
Engineering - Enforcement - Education.
Job Procedure.
Job Procedure on Taking Line Out. Grounding,
Putting Back in Service.
Break Line With Hot Clamp.
Unloading Poles.
National Safety Code.
Public Relations - How Far Should We Go?
Re-Design of Transformer on A-5, etc.
Engineering, Crossings, Spans, Splices, etc.
How Management and Foreman's Training Affects
Safety.
Retirement Insurance.
G. I. Training.
Job Procedure (Add A-5 to existing A-1-Hot).
Design of Tools and Equipment.
Foreman Training.

Future issues of THE LINEMAN will contain short articles covering much of the discussion on these topics.

The meeting was opened by D. A. Fleming, REA Safety Specialist, who was followed by J. K. Walsh, REA Training Officer, with a short talk on "A Safety Supervisor's Tool Kit." The conference was then turned over to the supervisors who carried the ball from there.

This Workshop was a success from the beginning.

LINE FOREMAN RESUSCITATES

(Continued from page 1)

grip, and asked the men on the ground to pull a little more slack so he could hook wire grip.

Foreman F, who had been standing near pole where men were working, walked over to assist the men pulling on line attached to conductor. It is evident that wire was caught under the tree limbs and F's added weight on line caused wire suddenly to come clear of limbs and jump above and over primary wire, thereby energizing secondary wire.

Both W and S were in contact with secondary wire at this instant. W attempting to hook wire grip and L holding loose end of secondary wire. A flash occurred at this instant, causing W to lose consciousness. He received burns on both hands and on left side of head.

S received only a slight shock. W's hook came out of pole and he slumped down pole until S's safety, being below W's safety, stopped his fall. S immediately reached out and grasped W and brought him down the pole on his safety belt. Artificial respiration, applied by Foreman F, succeeded in bringing W back to consciousness in about six minutes. A man had in the meantime been dispatched for a doctor and ambulance.

Upon arrival of doctor and ambulance W was carried to town where he received first aid. He was then sent to hospital for further treatment and observation.

FINDING OF INVESTIGATING COMMITTEE

The report of this accident was furnished by the Manager, State Safety Supervisor, and Field Supervisor, acting as an Investigating Committee.

The primary purpose of the investigation of this accident was to bring to light the accumulated causes rather than an attempt to place blame and criticism.

RECOMMENDATIONS OF COMMITTEE

1. That in the future the rubber glove rule be enforced to the letter, even to the extent of taking disciplinary action wherever violation is observed.
2. That the grounding rule be enforced to the same extent.
3. That the man supervising or in charge of work realize that his paramount duty is the safety of the men in his charge, and that it is his direct responsibility to see that all accepted safety practices be observed.
4. That this accident could have been avoided in three or more ways. Dry rope should have been used over wire in clearing from trees. Rubber gloves should have been worn. Temporary grounds should have been used.

WATCH FOR HARD LUCK HARRY - A Cartoon Series, Drawn Exclusively for the REA Lineman by George Perkins, Jr., Manager, Prairie Power Cooperative, Fairfield, Idaho.